

PATENT
Attorney Docket No. UM-06192

Applicants request that the Examiner review the Information Disclosure Statement and PTO Form 1449 filed April 17, 2003 (copy of Information Disclosure Statement, PTO Form 1449 and copy of return postcard date stamped April 21, 2003 are herein enclosed). Please notify the Applicants of its acceptance.

IN THE CLAIMS:

Please cancel Claim 2, and amend Claims 1, 9, 11, and 13.

1. (currently amended) A composition comprising a nanoemulsion formulation, wherein the nanoemulsion formulation comprises an aqueous component, an oil component, and a surfactant mixture component, wherein said surfactant mixture component comprises a low HLB value surfactant and a high HLB value surfactant, wherein the ratio of said low HLB value surfactant to said high HLB value surfactant is at least 2:1, and wherein said nanoemulsion formulation further comprises a biological agent, said biological agent comprising a nucleic acid.

2. (cancelled)

3. (original) The composition of Claim 1, wherein the ratio of said low HLB value surfactant to said high HLB value surfactant is at least 3:1.

4. (original) The composition of Claim 1, wherein said low HLB value surfactant has an HLB value between approximately 3.3 and 5.3 and the high HLB value surfactant has an HLB value between approximately 14.0 and 16.0.

5. (cancelled)

6. (original) The composition of Claim 1, wherein said nanoemulsion does not contain short-chain alcohols.

7. (original) The composition of Claim 1, wherein said low HLB value surfactant is present in a greater amount than said high HLB value surfactant.

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8. (original) The composition of Claim 1, wherein said surfactant mixture component comprises a low HLB value non-ionic surfactant and a high HLB value non-ionic surfactant.

9. (currently amended) A composition comprising a nanoemulsion formulation, said nanoemulsion formulation comprising a biological agent and a surfactant mixture component wherein said surfactant mixture component comprises a low HLB value surfactant and a high HLB value surfactant, wherein the ratio of said low HLB value surfactant to said high HLB value surfactant is at least 2:1, wherein said biological agent comprises a nucleic acid, wherein said nanoemulsion formulation permits a skin permeation rate of at least 0.447% per hour for said biological agent in said nanoemulsion formulation.

10. (original) The composition of Claim 9, wherein said skin permeation rate is selected from at least 0.519% per hour, at least 0.615% per hour, and at least 0.823% per hour.

11. (currently amended) A composition comprising a nanoemulsion formulation comprising a nucleic acid expression vector and a surfactant mixture component, wherein said surfactant mixture component comprises a low HLB value surfactant and a high HLB value surfactant, wherein the ratio of said low HLB value surfactant to said high HLB value surfactant is at least 2:1, wherein said nanoemulsion formulation permits said expression vector to express a recombinant peptide at a mean level of at least 57.0 pg/cm² in cells.

12. (original) The composition of Claim 11, wherein said recombinant peptide is expressed at a mean level selected from at least 100.0 pg/cm², at least 285.0 pg/cm², and at least 376.0 pg/cm².

13. (currently amended) A composition comprising a nanoemulsion formulation comprising a nucleic acid expression vector and a surfactant mixture component, wherein said surfactant mixture component comprises a low HLB value surfactant and a high HLB value surfactant, wherein the ratio of said low HLB value surfactant to said high HLB value surfactant

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is at least 2:1, wherein said nanoemulsion formulation permits said expression vector to express RNA transcripts at a level of at least 5.0×10^4 transcripts/cm² in cells.

14-20. (cancelled)